# Additional Q&A

*IGIC Seminar: Advanced Topics and Applications*

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## General

Q Compare performance with ArcIMS. I am currently using ArcIMS on a linux platform to provide web services for statewide orthophotography stored in ArcSDE/Oracle. I am interested in improving the web performance. I currently use mxd documents and Image Map services.

A To answer this completely I should compare a couple of different configurations.

- Configuration: ArcGIS Server cached map service compared to an ArcIMS service using ArcMap Server (publishing .mxd files via ArcIMS). ArcGIS Server cached map services are the fastest map service of any ESRI product. I am speaking here of fused map caches. Multi-layer cached map services should generally be avoided unless you are primarily working with desktop clients. Fused map caches are many times faster than dynamic maps.
- Configuration: ArcGIS Server dynamic maps compared to an ArcIMS service using ArcMap Server (publishing .mxd files via ArcIMS). I don't have any hard numbers on this but the rendering engine behind the ArcIMS ArcMap Server and ArcGIS Server dynamic maps is the same. So I would expect no difference in the map retrieval times.
- Configuration: ArcGIS Server dynamic maps compared to ArcIMS dynamic maps created completely in ArcIMS Author (all AXL). In this configuration ArcIMS is a little faster than ArcGIS Server. However, ArcGIS Server applications end up making less total requests of the web server because of the AJAX architecture. For this reason any performance advantage of ArcIMS over ArcGIS Server would likely be a wash.

Q IsArcGIS Server Supported on LINUX?

A Yes with the JAVA version on Linux AS/ES 4.0 and SUSE Linux Enterprise Server 9. See http://support.esri.com/index.cfm?fa=knowledgebase.systemRequirements.matrix&pName=ArcGIS+Server&productID=66&pvName=9.2&versionID=115&PID=66&PVID=350 for more details.

Q Is it realistic to cache maps for the statewide 2005 orthos?

A Yes it is realistic with adequate processing power but one should consider the audience. If this is meant to be a publicly available web site for casual users I would suggest a single cached map service combining vector and raster data. Kind of like the ArcGIS Online map services that are mostly vector but use raster data (DEM + Hillshade) for texture. Or if you want to allow the users to view just the orthos you might cache them but not at the full resolution. You could do the full resolution (use JPEG and prototype heavily) but you are talking about a lot of processing and a lot of storage on your web server (or a device attached to your web server). GIS users on the other hand will likely

want the full resolution and will be willing to wait a little to get it. In this case I'd look at Image server. Image server gives you the ability to quickly publish high performance image services without the overhead / maintenance hassles of a database. This may not be a concern for the 2005 orthos as those are already loaded and being served nicely from a geodatabase but moving forward I would look at image server. Hamilton county and the State are currently using image server very successfully.

Q Information on price and who best to contact when setting up Server.

A Your account rep is the best person to ask. If you don't know who that is, feel free to e-mail me tbrenneman@esri.com and I'll find out.

Q What to know how to create and deploy webservices and applications. What is the best way to build one GIS application (.mxd project) with lots of layers and serve it out so others can access and use on the web but still be able to download part or all of the layers in the application (.MXD project)to a different machine?

A Consider your audience. Who is it that you will be accessing the site on the web? The general public? If so that is a very different audience than your GIS users. Consider creating a single fused cache for the public web site and a dynamic service for your ArcMap users. That way the ArcMap users will have individual layer control that they are used to and the general public will have the cached map experience that they are used to. These multiple services could even be based on the same .MXD. If data download is what you need consider building a clip-zip-ship geoprocessing model. Read about tools for zipping and unzipping data in the online help. Or, for an out-of-the-box solution 39°N showed a really nice solution that they have developed for exactly this purpose. Contact Chris Walls (chris@39dn.com or 812-320-5467) for more information on their solution.

Q If an ArcGIS Server application (.mxd project)is available through the web, is there a way that people could place a point on the map and the application could capture that point with the coordinates so it could be used in a new layer.

A If you need to use ArcGIS Desktop as a the tool for adding the feature and the ArcGIS Desktop client can't access the geodatabase directly, you could use the replication approach that I showed at the end of the session. This is possible with ArcGIS Server Basic, Standard, or Advanced but you would need at least Standard to publish a map service to use as reference. However, if you can place the point on the map with a web application than you can use the web editing capability of ArcGIS Server Advanced that I demonstrated.

## Programming

Q Alternatives to the treeview for result display. If there is a single hit address match on a locator, is there an easy way to automatically zoom and drop a marker on that position?

A For a treeview alternative see http://arcscripts.esri.com/details.asp?dbid=15452 or http://arcscripts.esri.com/details.asp?dbid=15621. Notice that there is a full discussion in the first like on the ArcGIS Server Development blog. For automatic zooming see: http://blogs.esri.com/Dev/blogs/arcgisserver/archive/2007/05/03/Follow_2D00_up-to-Extending-the-QueryAttributes-Task_3A00_-Zooming-to-selected-features.aspx or http://blogs.esri.com/Dev/blogs/arcgisserver/archive/2007/08/28/Automatically-zooming-to-task-results.aspx

Q Are there changes in tool tips in 9.3?

A Yes. It now supports points, lines, and polygons and the UI for configuring the display is much better. It is the same UI as the layer configuration that allows for the display of links that I showed in the web mapping application using the Identify tool.

Q Are there changes in create an application template?

A I'm not sure I understand this question. If someone would like to clarify it for me I will check on this.

Q Overview map in 9.3 manager application, can it be separate and not in the main map window?

A Yes, now the Overview map is a part of the standard toolbar in the web mapping application and it expands right next to the tool.

Q Creating custom tasks using the web ADF such as the Querybuilder task and the grid results container you posted to the arcscripts download.

A This is a pretty involved topic. This is discussed in great detail in the Developing Application wit ArcGIS Server Using the Microsoft .NET Framework or the Java Platform.

### Mobile

Q Automatic Vehicle Location.

A Chris showed an application developed be 39°N that does this. ArcGIS Server Advanced Enterprise supports this with the mobile framework or this can be developed using ArcGIS Server Standard and devices updating the graphics layer. Again, Chris's contact info: Chris Walls (chris@39dn.com or 812-320-5467) or you can contact your ESRI rep for more solutions in this area.